Topics

- Objectives
- The Value Chain Evolution
- The Business Role Model Definition
- Introduction of Sound Business Model Examples
- Summary & Highlight's
Objectives

This paper has been performed within the MUSE IST-6thFP-507295 does mainly focus on:

- the further development of the business role model definition in a multi-service and multi provider environment &
- the definition of the related sound business models.
Challenge: Find business models, that allow each player to tap on the revenue stream
The Value Chain evolution - From vertical towards horizontal model

Bundled Value chain

Unbundled Value chain
Efficiency considerations: multi-services provided by multiple providers

Two new roles defined (compared with DSLForum TR-058)

Applications delivered with an assured QoS

The Business Role Model

- Provide more flexibility in describing business models

Customer consumer

Packager

Connectivity Provider

Application Service Provider

Network Service Provider

Application Service Provider

Application Service Provider

Content Provider

Application Service / Content Provider

Customer

Packager

Access Network Provider (ANP)

Regional Network Provider (RNP)

Connectivity Provider

Network Service Provider (NSP)

Application Service Provider (ASP)

Content Provider
> The Value Chain chapter presents a business role model and describes the various roles.

> **Goal:** Providing a common terminology which can be used for comparising different business models and defining network requirements.

> Business roles are defined by grouping a number of tasks in a logical way; actors fulfil the various roles.

> **Roles versus actors:**
  - Actors can change in the course of time and can be different in different countries.
  - Roles stay the same; matter of definition.
Two new roles (compared with DSLForum TR-058)

- Customer
- Packager
- Access Network Provider (ANP)
- Regional Network Provider (RNP)
- Connectivity Provider
- Network Service Provider (NSP)
- Application Service Provider (ASP)
- Content Provider

→ Provide more flexibility in describing (future) business models
Packager (1)

> Supports the Customer (single point of contact)

> Combines (by means of SLAs) access network services, on the one hand, with core network services and applications services on the other hand.

> Has an overview of the services that require a guaranteed QoS
  - Takes care that a Customer does not subscribe to more services than the CPE or network connection supports.

> May control the ACS (auto-configuration server) for CPE management.

> May store Customer profiling information that can be used by ASPs or NSPs.
Packager (2)

> **Difficulty**: In current business models the Packager role is often distributed among several actors (incl. the consumer himself).

  • This can be confusing to the Customer and is therefore considered as a less ideal situation.

> But, introducing the Packager role helps to think from a Customer point of view rather than from a network technology point of view.
Connectivity Provider

> Is responsible for the end-to-end connectivity between CPE and the NSP/ASP.

> Combines the access network service (by the ANP) and the regional network service (by the RNP).

> Is responsible for the Edge Node:
  • Authentication, Accounting, Administration;
  • Issuing IP addresses;
  • End user assignment
  • ...
Sound Business Models

- Service Provider Focused Model (Wholesale Model)
- Network Operator Focused Model
- Independent Service Provider Model
- Super Provider Model
- Neutral Network Provider - BSA Approach
An example for this business model is Cistron (actor B) and Tiscali or BBNED (actor C) in the Netherlands (http://www.cistron.nl/internetverbinding_dsl_part_adsl.html).
The Service Provider Focussed Model – ISP (Wholesale Model)

> The NSP (ISP) organises its business in order to resell provisioning and access connectivity to the Internet.

> Additionally, the ISP might offer supplementary services like for instance e-mail and web site hosting.

> He has a direct relationship to the customer, to the connectivity provider and to one or more other ASP’s.

> The ISP collects the total prices and fees from the customer. The ISP has to seed back the related amounts to the other actors.
An example for this business model is BT and Yahoo in UK, which is offered as ‘BT Yahoo! Broadband’ [http://www.bt.co.uk/broadband/bb_info.jsp](http://www.bt.co.uk/broadband/bb_info.jsp), the customer receives just one bill monthly.
An example of this business model in The Netherlands is KPN (actor B) and Wanadoo (actor C) with the customer receiving two bills monthly respectively to KPN & Wanadoo (http://www.wanadoo.nl/adsl/info_adsl_go.html).
In this example actor KPN plays the roles of packager, connectivity provider and ASP (only for internet access) and has a business relationship R11 with the customer for this.

The customer has a separate business relationship R12 with another actor (Web hosting firm) for a web home page and email.
An example of this business model is the yahooBB service in Japan, which owns the infrastructure, is an ISP, a phone service provider and application service(s) provider.

Another example with the roles being distributed among mother & daughter companies is KPN and Planet Internet, XS4all & ‘Het Net’ in The Netherlands.
The Broadband Society of Aarhus business model is a so-called “Operator neutral network”:

- BSA is a **non-profit organisation**!
- BSA will run the Aarhus Internet Exchange (AIX) **at a cost covering expense only**. The AIX will be a non-competing internet exchange.

- **Connecting all the independent networks** in Aarhus through a switch – Aarhus Internet Exchange (AIX).

- **Give the users real broadband** +2 Mbit/sec. (up to 100 Mbit/sec. by 2010).

- **Install fibre** all the way to the user to secure a future proof solution.

- **Create a critical mass** of users combined with enough bandwidth will create a growth of improved and new services to broadband customers.

- **Acting as a knowledge** base for public, commercial and private users regarding broadband, its potential and usage
The business relationships R2 can have a variety of forms:

> It can be the **student** who lives in one of the 8+ connected **campuses** in Aarhus

> It can be the **private business** who has already formed a small gigabit network or

> It can be the **private end-user** who is connected through a small network in an **Apartment net**
Highlights (1): More flexibility in describing (future) business models

- Two new roles compared to the DSL Forum TR-058 has been developed which are:
  - Packager (P) and
  - Connectivity Provider (CP).

- **The Packager** supports the Customer (single point of contact) and combines (by means of SLAs) access network services, on the one hand, with core network services and applications services on the other hand.

- **The Connectivity Provider** is responsible for the end-to-end connectivity between CPE and the NSP/ASP and combines the access service (by the ASP) and the regional network service (by the RNP).
Features and Highlights (2):
xxIntroduction of sound Business Models

➢ Introduction of important business model flavours as:
  ➢ Service Provider Focused Model (Wholesale Model),
  ➢ Network Operator Focused Model,
  ➢ Independent Service Provider Model and
  ➢ Super Provider Model (Vertical Integration Model)

➢ Beside this the paper highlights a special approach:
  ➢ The public-private- partnership, where broadband access is ensured by connecting independent networks of Municipality’s and County’s.
  ➢ The main difference compared to the other business models is that the roles of Network Access Provider and Connectivity Provider are taken by different entities.
Thank you for your attention!

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